

# TRANSMITTAL OF FORMAL DRAWINGS

Docket No.  
JHUC-P047740

COPY OF PAPERS  
ORIGINALLY FILED

In R Application Of: Beachy, et al.



Serial No.

09/708,964

Filing Date

November 8, 2000

Class No.

N/A

Examiner

B. Badio

Unit

16


Invention: **HEDGEHOG SIGNALING PATHWAYS, COMPOSITIONS AND USES RELATED THERETO**

Address to:  
Assistant Commissioner for Patents  
Washington, D.C. 20231

Transmitted herewith are:

16 sheets of formal drawing(s) for this application.

Each sheet of drawing indicates the identifying indicia suggested in 37 CFR Section 1.84(c)  
on the reverse side of the drawing.

  
Signature

David P. Halstead  
Reg. No. 44,735  
Ropes & Gray  
Patent Group  
One International Place  
Boston, Massachusetts 02110

Dated: November 20, 2001

I certify that this document and attached formal drawings  
are being deposited on 11/20/01 with the  
U.S. Postal Service as first class mail under 37 C.F.R. 1.8  
and addressed to the Assistant Commissioner for Patents,  
Washington, D.C., 20231.

  
Signature of Person Mailing Correspondence

Karen DiR cc

Typed or Printed Name of Person Mailing Correspondence

1/16

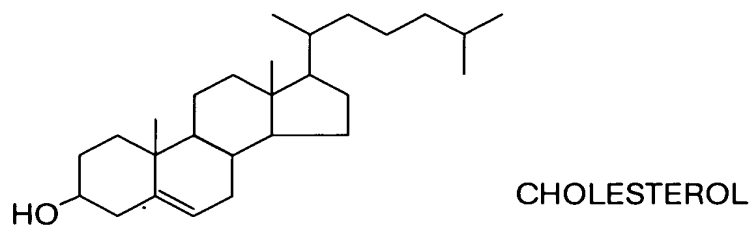
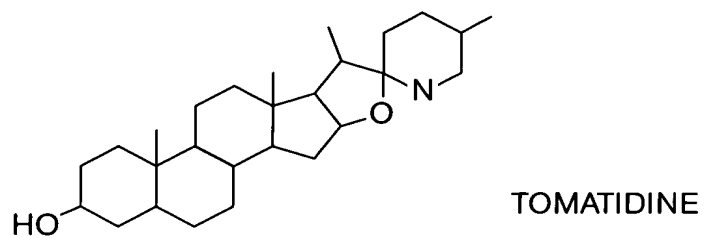
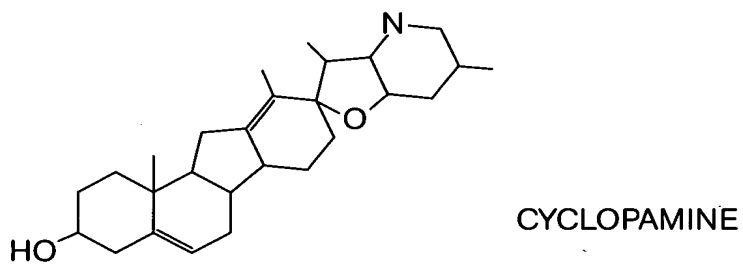
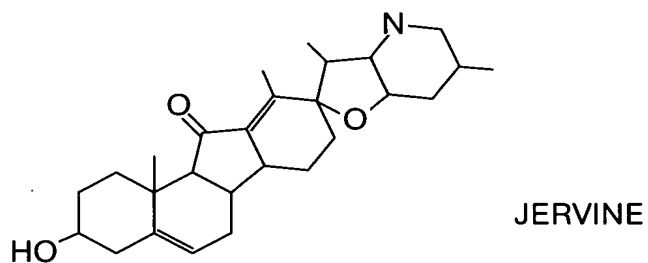
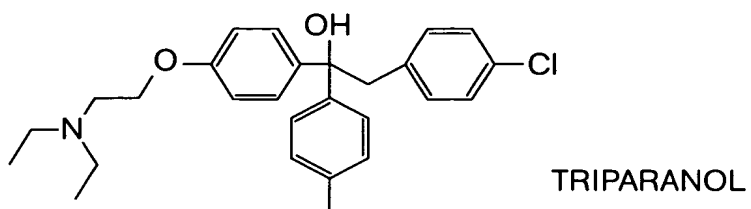
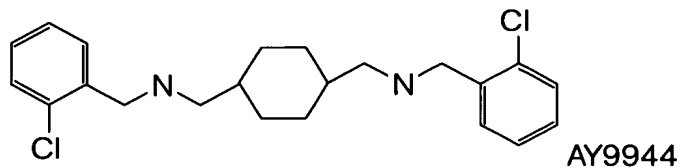


Fig. 1



Fig. 2A

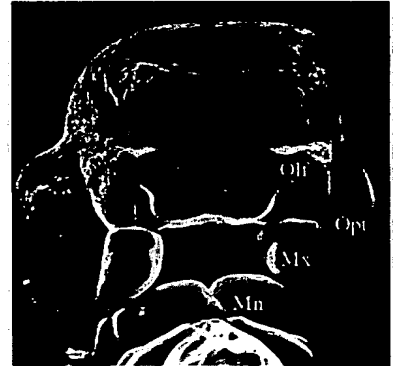


Fig. 2B



Fig. 2C



Fig. 2D

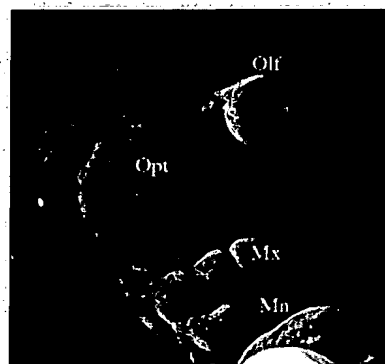


Fig. 2E

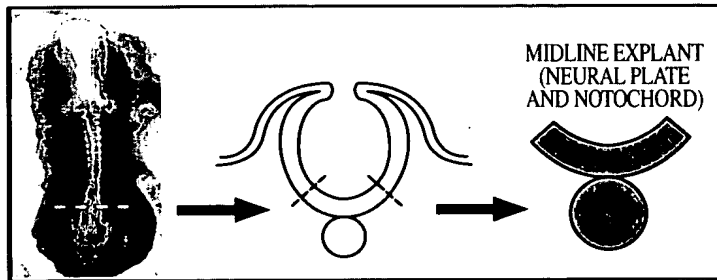


Fig. 3A



Fig. 3B

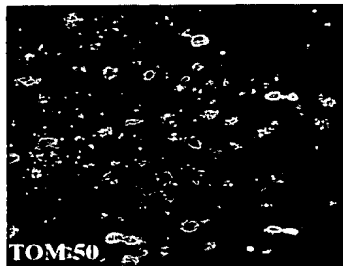


Fig. 3C

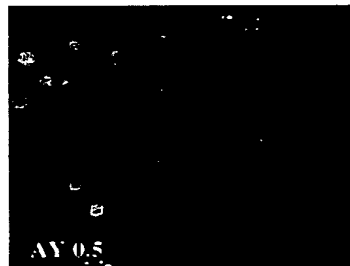


Fig. 3D

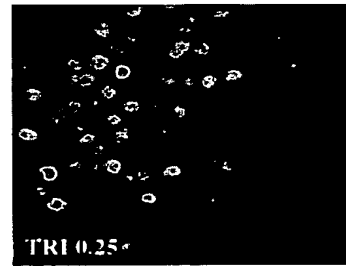


Fig. 3E

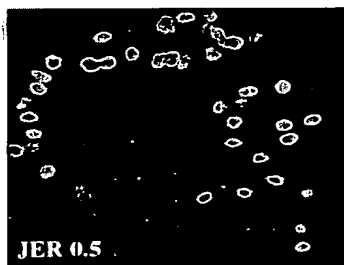


Fig. 3F

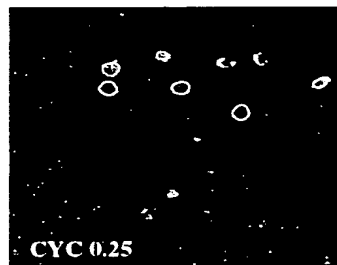


Fig. 3G

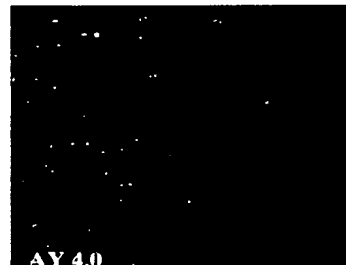


Fig. 3H

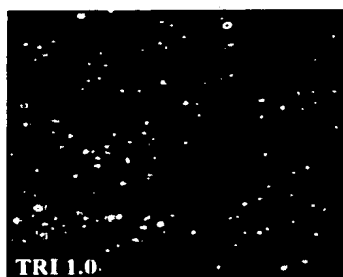


Fig. 3I



Fig. 3J

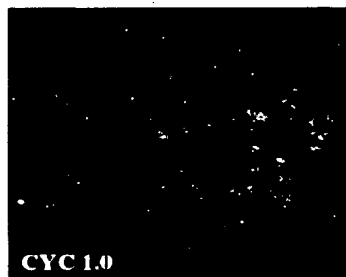
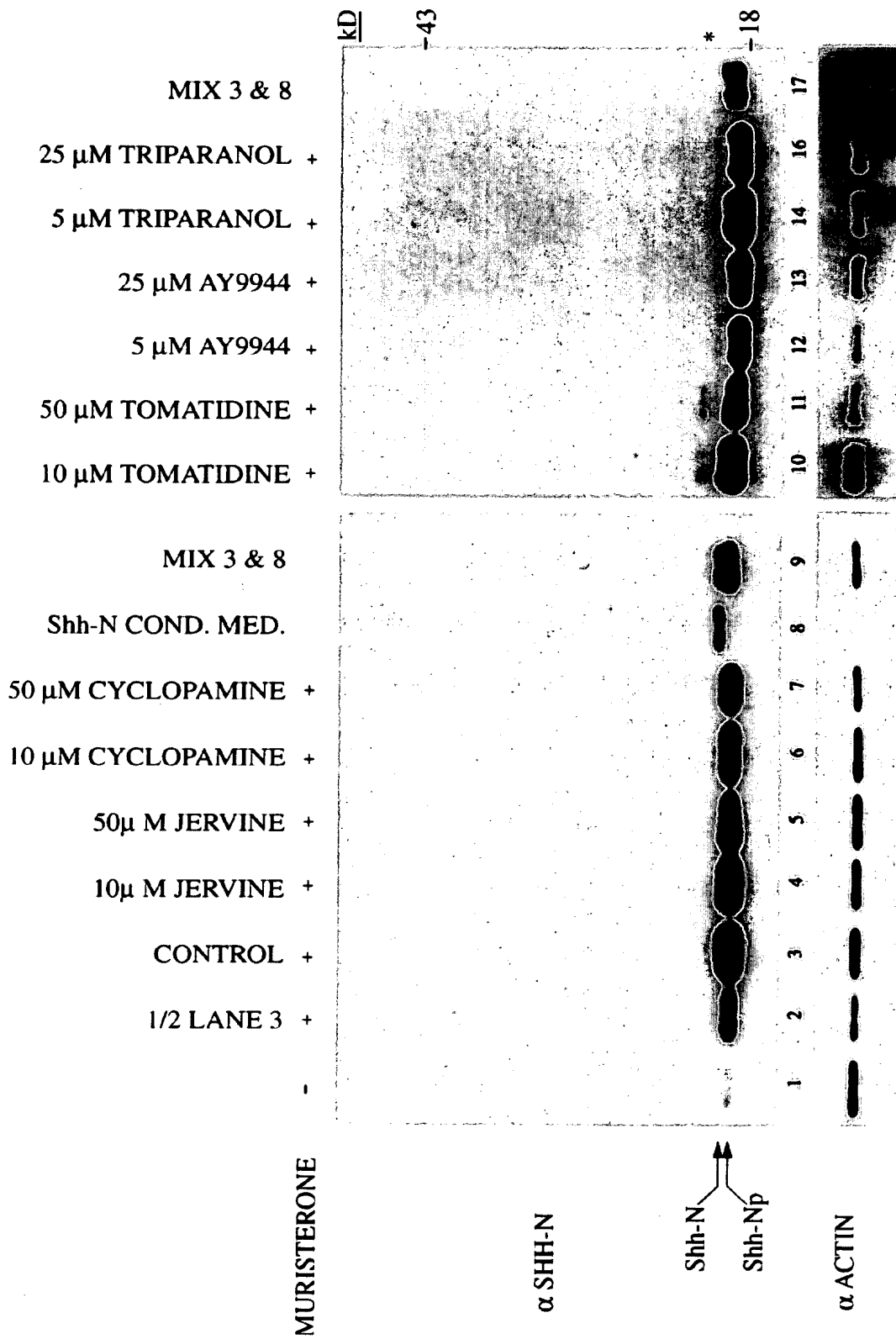


Fig. 3K



**Fig. 4**

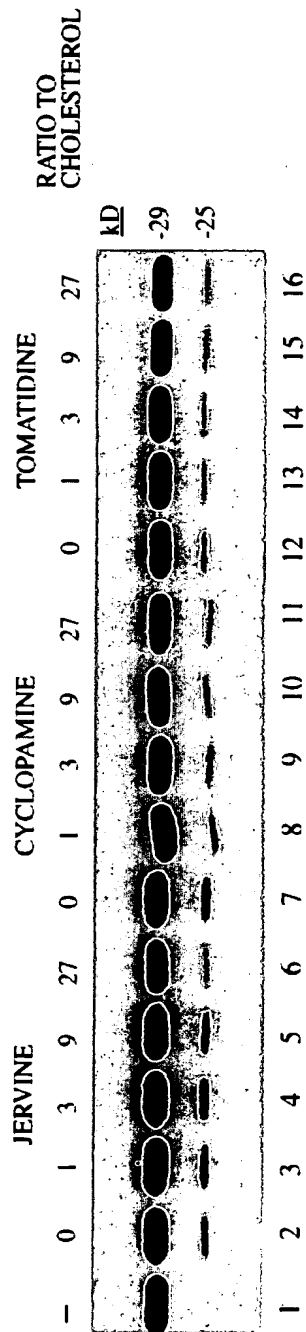


Fig. 5A

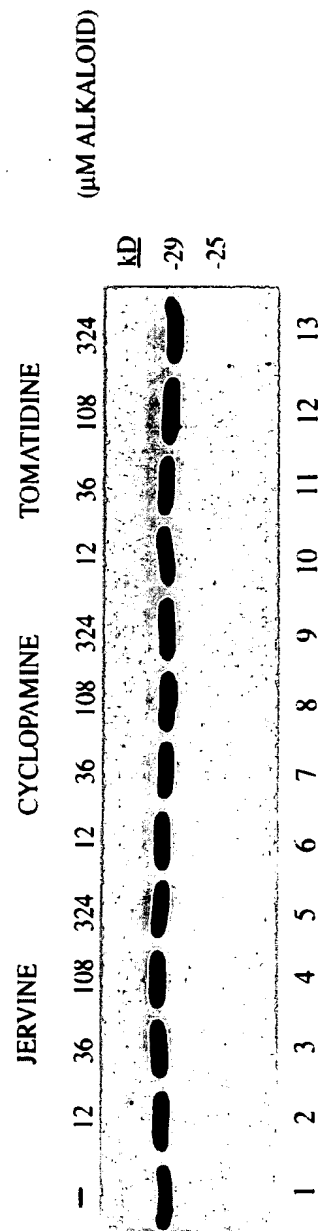


Fig. 5B

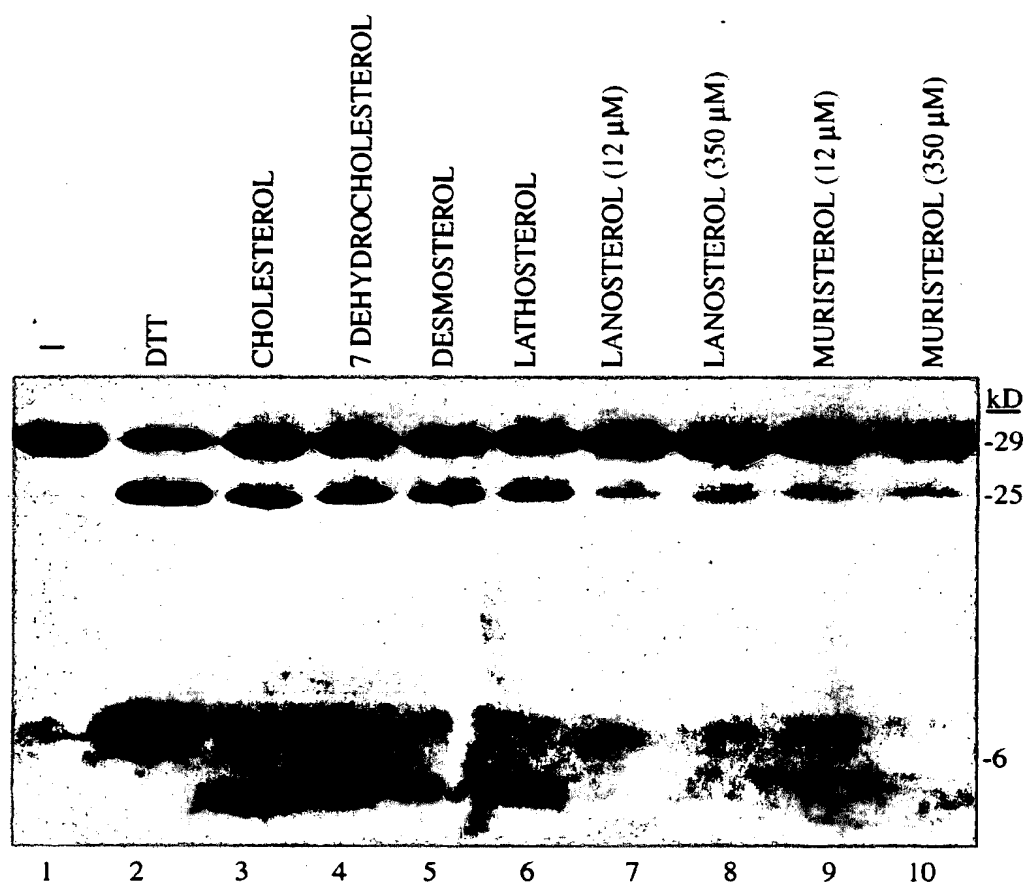


Fig. 5C

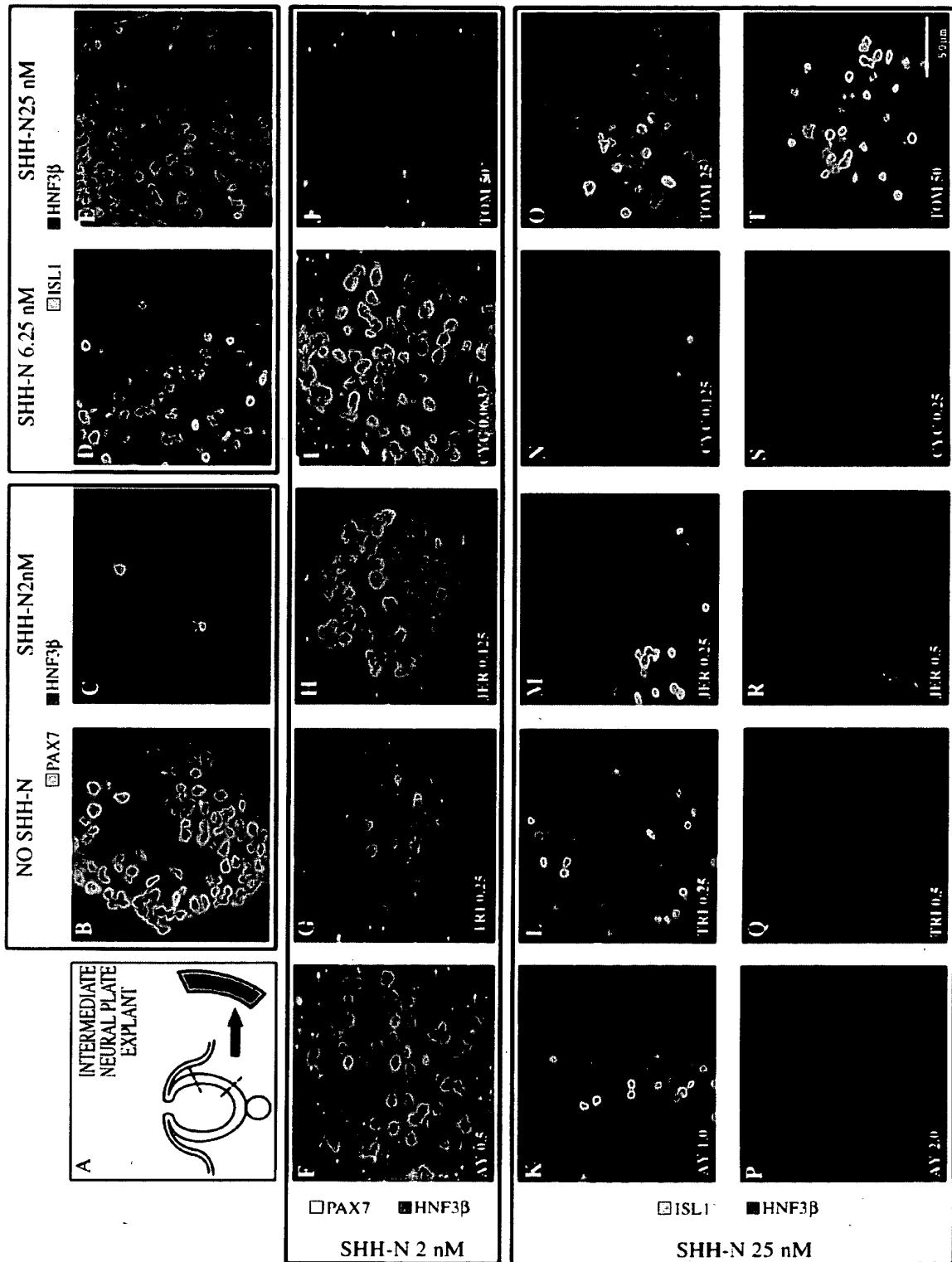


Fig. 6 (A-T)



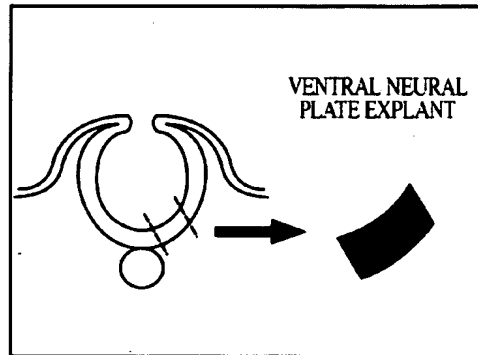


Fig. 7A

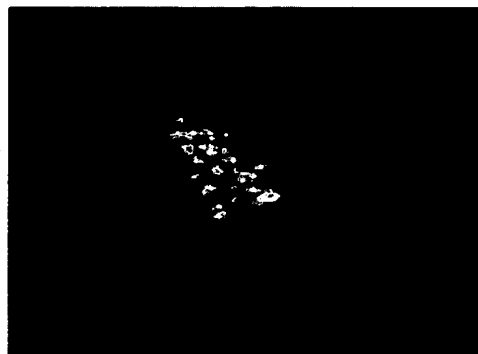


Fig. 7B

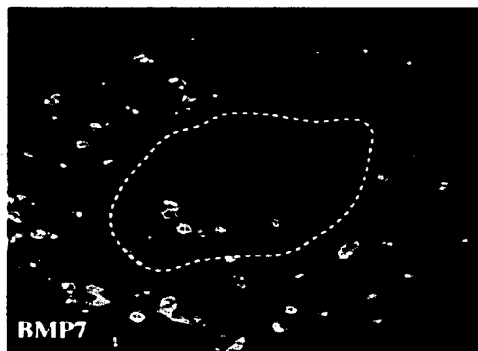


Fig. 7C



Fig. 7D

9/16

Control



Fig. 8A

*Shh* -/-

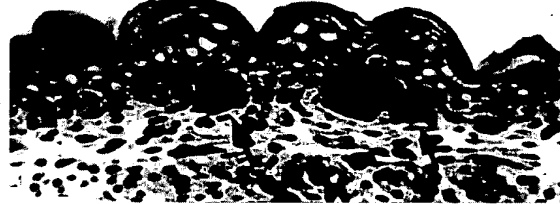


Fig. 8B

Control

*Gli1*

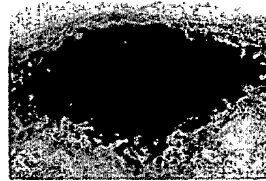


Fig. 8C

*Shh* -/-

*Gli1*



Fig. 8D

Control

*Ptc1*

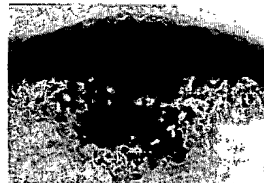


Fig. 8E

*Shh* -/-

*Ptc1*

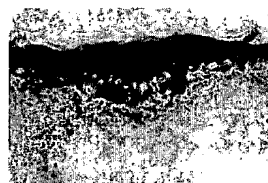


Fig. 8F

Control

*BMP-4*



Fig. 8G

*Shh* -/-

*BMP-4*



Fig. 8H

Control

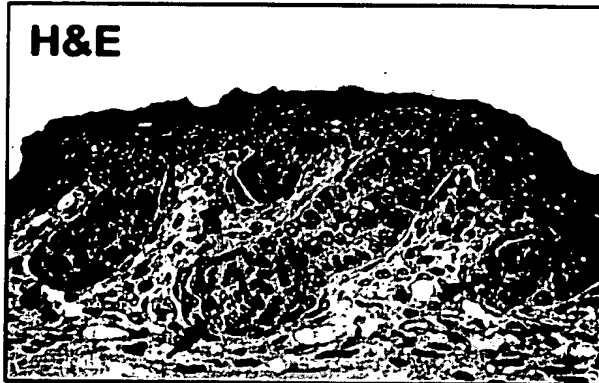


Fig. 9A

*Shh* -/-

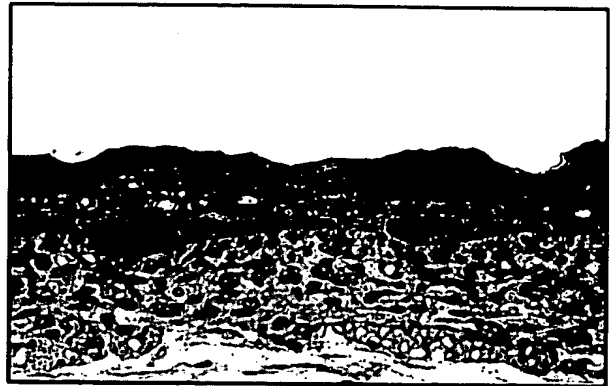


Fig. 9B

Control



Fig. 9C

*Shh* -/-

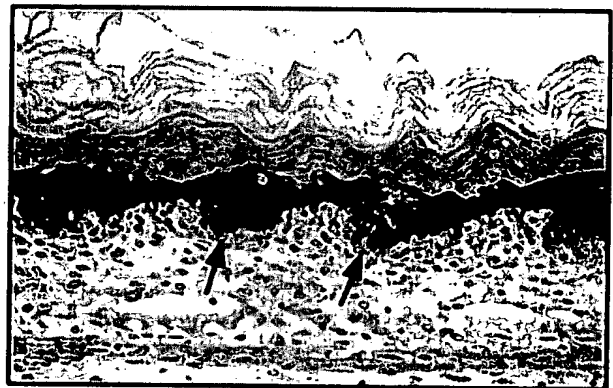


Fig. 9D

Control



Fig. 9E

*Shh* -/-



Fig. 9F

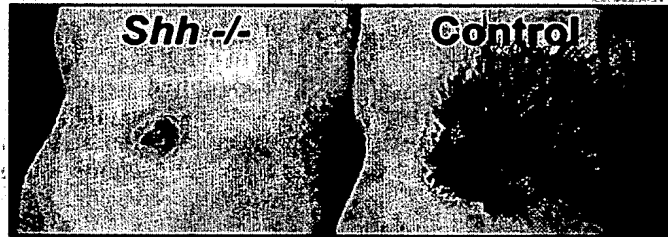


Fig. 10A

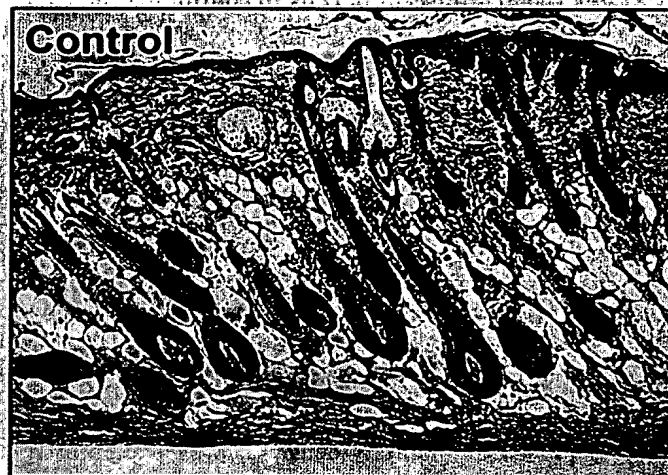


Fig. 10B

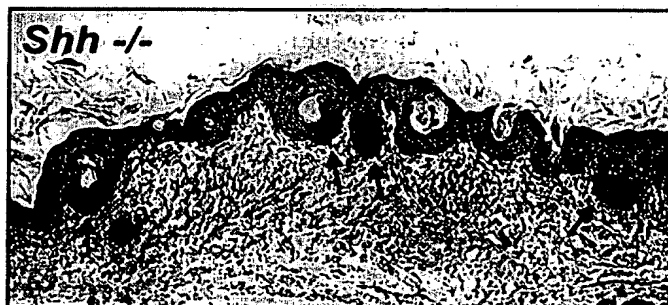


Fig. 10C

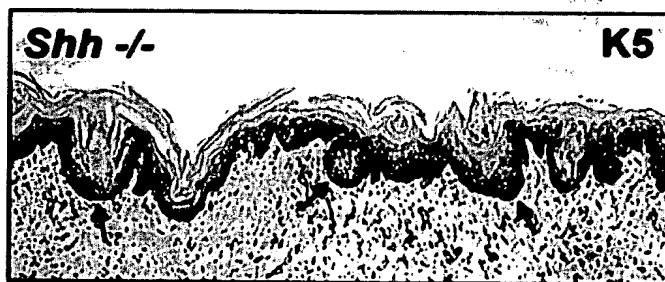


Fig. 10D

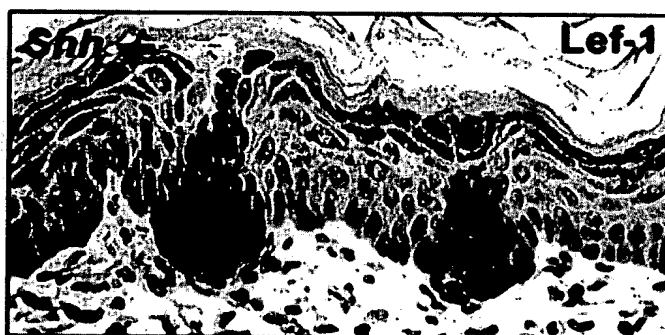


Fig. 10E

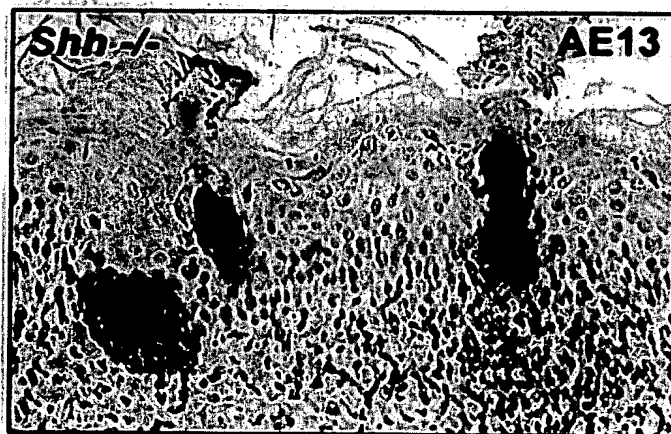


Fig. 10F

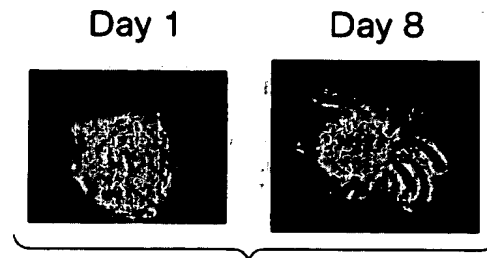


Fig. 11A

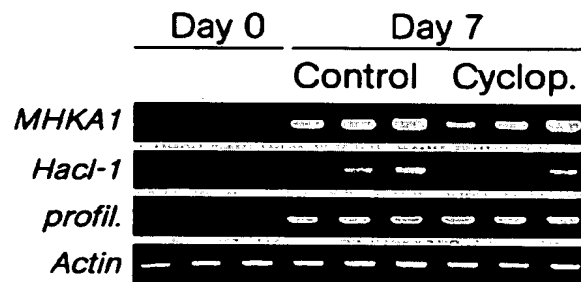
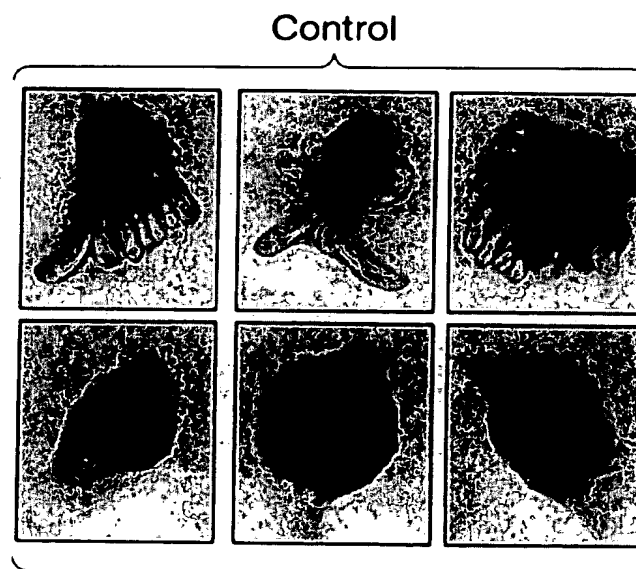


Fig. 11B



Cyclopamine

Fig. 11C

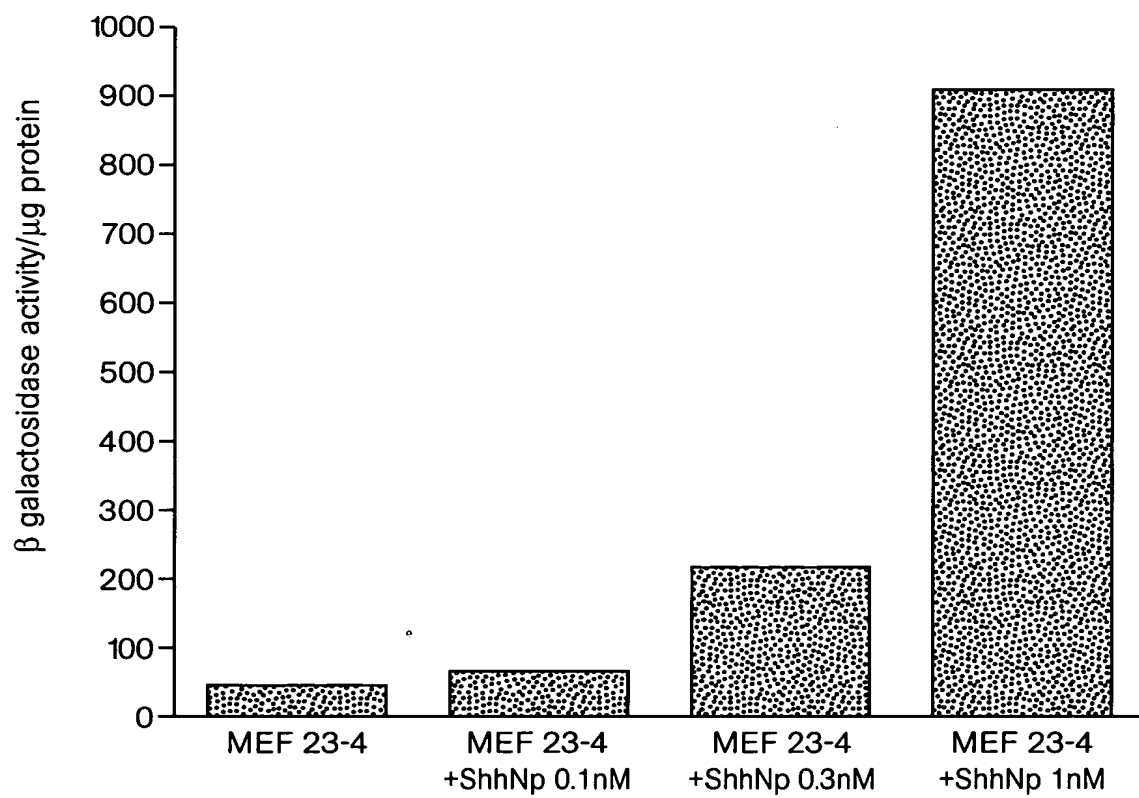


Fig. 12

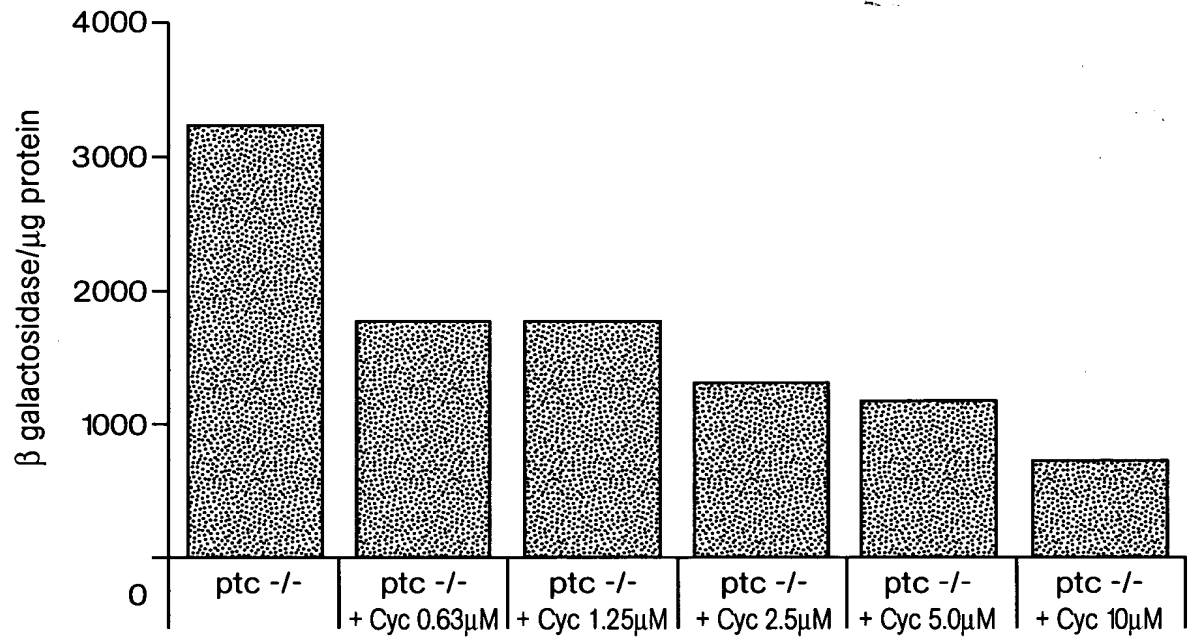


Fig. 13

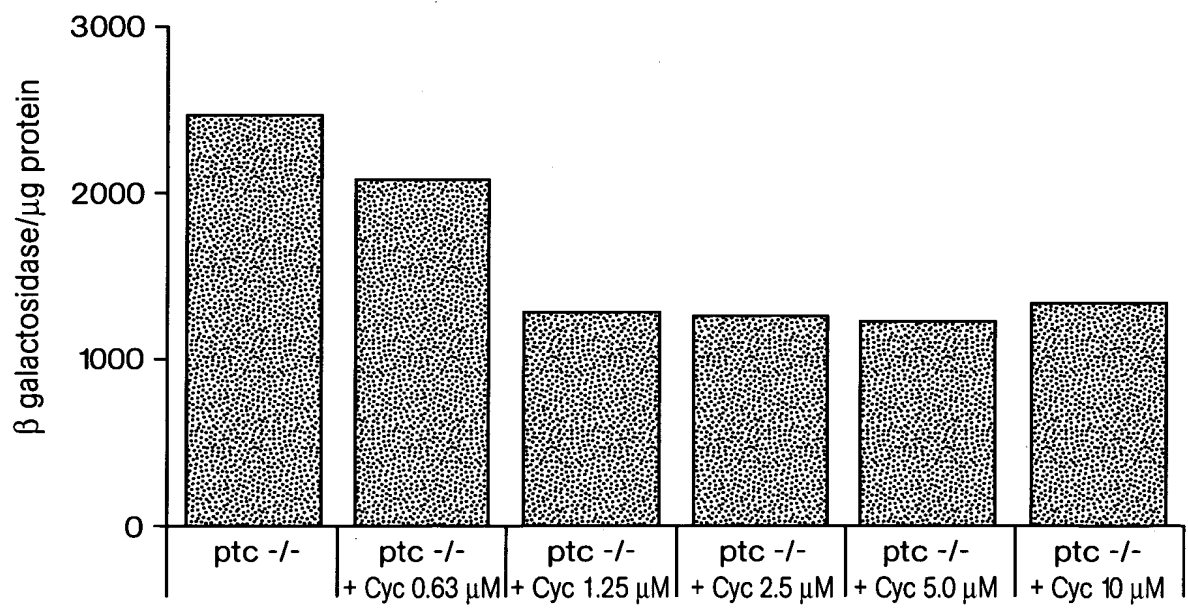


Fig. 14



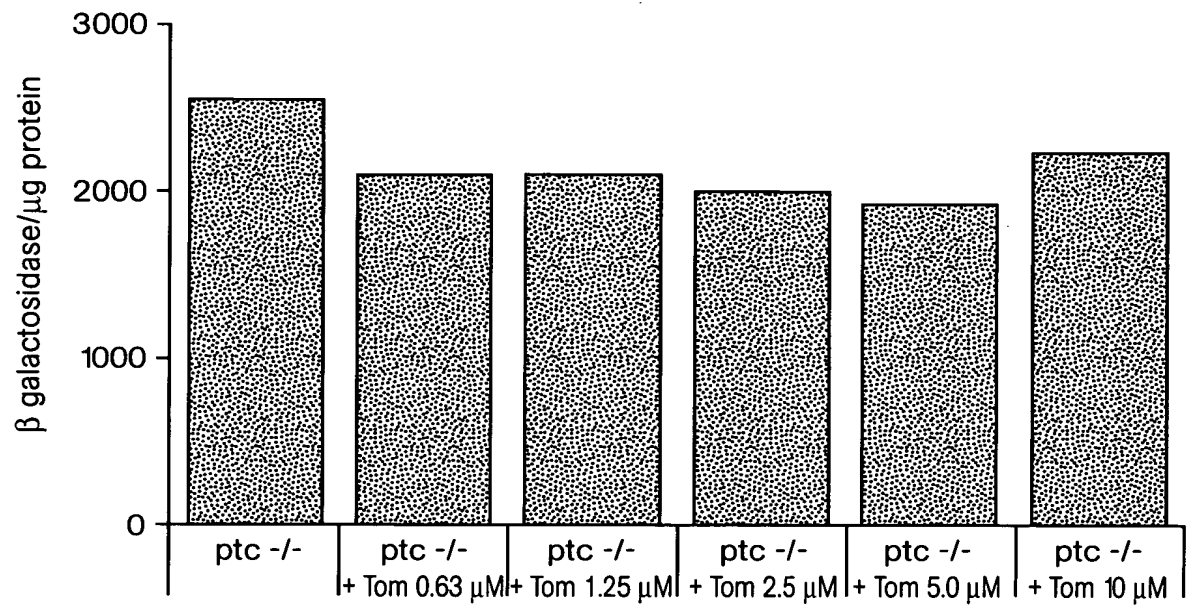


Fig. 15